



**EARTH RESOURCES REGULATOR  
REFERRAL CONSULTATION CHECKLIST - WORK PLAN VARIATION**

<b>TENEMENT ID:</b>	WA127.
<b>APPLICANT NAME(S):</b>	Hanson Construction Materials Pty Ltd.
<b>ADDRESS (correspondence):</b>	250 Bay Street BRIGHTON VIC 3186
<b>SITE MEETING:</b>	<input checked="" type="checkbox"/> Yes Date: <input type="checkbox"/> No <input type="checkbox"/> NA Comment: Not held.
<b>APPLICATION TYPE:</b>	WORK PLAN VARIATION.
<b>MUNICIPALITY/SHIRE:</b>	Cardinia Shire Council.
<b>LAND STATUS:</b>	<input type="checkbox"/> Crown <input checked="" type="checkbox"/> Private <input type="checkbox"/> Crown & Private <i>(If Crown Land - Has proponent been informed of NT issues?)</i>
<b>ADDRESS (site):</b>	870 and 910 WESTERNPORT ROAD YANNATHAN 3981.
<b>PROPERTY PARCEL REF:</b>	Standard Parcel Identifier (SPI): 100B\PP2969 and 39B\PP2969.
<b>PLANNING REQUIREMENT:</b>	<input type="checkbox"/> No Change <input type="checkbox"/> Secondary Consent <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> New (existing use rights applied previously) <input type="checkbox"/> New (Proposed expansion includes property parcels not on the current planning permit) <input type="checkbox"/> To be determined* (planning status advice not provided) *Planning status must be determined prior to submission of the work plan variation as it determines the type of approval process and requirements. If an amendment of an existing permit or a new permit is required, the approval process must include statutory endorsement. Comment:



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Agencies may elect to provide a desktop response and not attend the initial site meeting. This is acceptable where the management of any issues is not required or is not complex.

If agencies determine that there is no requirement or elect to provide a desktop response. The advice must be given before the initial site meeting and tabled on the day for discussion and comment.

Please note that if the process is known to be statutory (amendment or new planning permit required) or undetermined there will be a combination of Victorian Planning Provision referral requirements (Use and Development, Zones and Overlays referrals) and other referral requirements selected.

If the process is known to be non-statutory (no change to the planning permit or secondary consent) only other referral requirements will be selected.

If EES criteria have been listed, please determine if an EES is required.

## MRSDA S.77TE (1) – Planning and Environment Act 1987

### USE AND DEVELOPMENT REFERRALS

Tick If Applicable ✓	Tick if Referred under the VPP CLAUSE ✓	AGENCY	VPP REFERRAL TRIGGER
		EPA	<p><b>Clause 66.02-1</b> Use or development requiring any of the following:</p> <ul style="list-style-type: none"> <li>– A Development Licence or Operating Licence in accordance with Part 4.4 of the <i>Environment Protection Act 2017</i></li> <li>– Amendment of a licence in accordance with Part 4.3 of the <i>Environment Protection Act 2017</i>.</li> </ul> <p><b>NA</b> The area of the proposed extension contains a waterway. Extraction proposed north of the waterway, reinstatement of this area and relocation of the current waterway.</p> <p>The variation proposes to extend the area of extraction to the northern portion of the site and to increase the depth of extraction from 9mAHD to -9mAHD over the entire approved extraction area.</p> <p>Drainage from the undeveloped areas to the north and east of the site flow into a current waterway which enters the site from the south-east and leaves via a culvert under Milners Road to the west and ultimately discharges to the Lang Lang River.</p>
		DEECA – PEA	<p><b>Clause 66.02-2</b> Native Vegetation – (Refer to parameters provided in cl66.02-2 of the VPP).</p> <ul style="list-style-type: none"> <li>– To remove, destroy or lop native vegetation in the Detailed</li> </ul>



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			<p>Assessment Pathway as defined in the <i>Guidelines for the removal, destruction or lopping of native vegetation</i> (Department of Environment, Land, Water and Planning, 2017).</p> <ul style="list-style-type: none"> <li>– includes clearing of 0.5 hectare or more</li> <li>– To remove, destroy or lop native vegetation if a property vegetation plan applies to the site.</li> <li>– To remove, destroy or lop native vegetation on Crown land which is occupied or managed by the responsible authority.</li> </ul> <p><b>NA</b></p> <p>The vegetation proposed to be removed is within Location 2 (as defined in DELWP 2017), with one Large scattered tree (with an extent of 0.0703 hectares) proposed to be removed.</p> <p>As such, the permit application falls under the Intermediate Assessment pathway. The offset requirement for native vegetation removal is 0.015 General Habitat Units (HUs) and one Large Tree.</p> <p>GeoVic identifies two Endangered Ecological Vegetation Groups. Swampy Woodland EVC No 937 and Grassy Woodland EVC No 175.</p>
		<p>INSERT RELEVANT ELECTRICITY TRANSMISSION AUTHORITY</p>	<p><b>Clause 66.02-4</b></p> <p>Works within 60 metres of a major electricity transmission line (220 Kilovolts or more), or transmission easement.</p> <p><b>NA.</b></p> <p>Dial-before-you-dig indicates high voltage overhead powerlines along the southern side of Westernport Road (northern site boundary) and the eastern side of Milners Road (western site boundary).</p> <p>A high voltage underground cable extends from Westernport Road to the processing plant (Figure 2-3).</p> <p>The Australian Energy Market Operator website indicates there are no transmission lines 132kV-500kV are present - the nearest is a 500kV line at Clyde North approximately 15 km north of the site.</p>
		<p>INSERT RELEVANT WATER BOARD OR WATER SUPPLY AUTHORITY</p>	<p><b>Clause 66.02-5</b></p> <p>Special Water Supply Catchment Area as listed in Schedule 5 of the <i>Catchment &amp; Land Protection Act 1994</i> (refer to GeoVic).</p> <p><b>NA.</b></p> <p>The proposed work plan variation is not within a Special Water Supply Catchment Area as listed in Schedule 5 of the <i>Catchment &amp; Land Protection Act 1994</i>.</p>



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✓	✓	HV	<p><b>Clause 66.02-8</b> Extractive Industry – <i>Heritage Act 2017</i> – (Not CHMP issues).</p> <p>Automatic referral for extractive industry. No Heritage Inventory or Registered areas nearby.</p> <p>There are no heritage inventory or registered sites within the work authority or within 100m laterally or vertically of the final limits of disturbance.</p> <p>The nearest registered heritage site is the Glen Afton Stud located at 210 Heads Road, Yannathan, approximately 2.2 km north of the site.</p>
		DEECA – PEA	<p><b>Clause 66.02-8</b> Extractive Industry – Crown Land or land abutting Crown land, other than a government road. <b>NA.</b></p>
		DEECA – PEA	<p><b>Clause 66.02-8</b> Extractive Industry</p> <ul style="list-style-type: none"> <li>– Special Areas declared under Section 27 <i>Catchment and Land Protection Act 1994</i> (refer to GeoVic).</li> <li>– Removal or destruction of native vegetation if total area to be cleared is 10 hectares or greater.</li> <li>– Land identified in the planning scheme as being subject to high erosion risk or areas identified as being subject to salinity management.</li> </ul> <p><b>NA.</b></p> <p>The vegetation proposed to be removed is within Location 2 (as defined in DELWP 2017), with one Large scattered tree (with an extent of 0.0703 hectares) proposed to be removed.</p> <p>As such, the permit application falls under the Intermediate Assessment pathway. The offset requirement for native vegetation removal is 0.015 General Habitat Units (HUs) and one Large Tree.</p> <p>GeoVic identifies two Endangered Ecological Vegetation Groups. Swampy Woodland EVC No 937 and Grassy Woodland EVC No 175.</p> <p>No Erosion or Salinity Management Overlay exists.</p>
✓	✓	DEECA – PEA	<p><b>Clause 66.02-8</b> Extractive Industry</p> <ul style="list-style-type: none"> <li>– In areas with communities or taxa listed or critical habitat determined under the <i>Flora and Fauna Guarantee Act 1988</i>.</li> <li>– On land which has been identified in the planning scheme as containing sites of flora or fauna significance.</li> </ul>



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			<p>Referred to ascertain any permit requirements. The approved work authority is covered by a Significant Landscape Overlay - Schedule 3 and works propose the removal or destruction of native vegetation (including trees, shrubs, herbs, sedges and grasses).</p> <p>The vegetation proposed to be removed is within Location 2 (as defined in DELWP 2017), with one Large scattered tree (with an extent of 0.0703 hectares) proposed to be removed.</p> <p>GeoVic identifies Swampy Riparian Woodland EVC No 83 within the approved work authority but not within the proposed disturbance area for this work plan variation.</p>
		DEECA – PEA	<p><b>Clause 66.02-8</b> Extractive Industry On land which has been identified in the planning scheme as flood prone. <b>NA.</b> Land has not been identified in the planning scheme as flood prone.</p>
		EPA	<p><b>Clause 66.02-8</b> Extractive Industry – where the land is intended to be used for land fill at a future date. <b>NA.</b> Land is not intended to be used for land fill at a future date.</p>
<b>ZONES AND OVERLAYS REFERRALS</b>			
<b>Tick If Applicable</b> ✓	<b>Tick if Referred under the VPP CLAUSE</b> ✓	<b>AGENCY</b>	<b>VPP REFERRAL TRIGGER</b>
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	<p><b>Clause 37.03-5</b> Urban Floodway Zone (UFZ). <b>NA.</b> Land has not been identified in the urban floodway zone (UFZ).</p>
		DEECA – PEA	<p><b>Clause 44.02-8</b> Salinity Management Overlay (SMO). <b>NA.</b> Land has not been identified in the salinity management overlay (SMO).</p>
		INSERT RELEVANT	<p><b>Clause 44.03-6</b> Floodway Overlay (FO or RFO).</p>



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		FLOODPLAIN MANAGEMENT AUTHORITY	<b>NA.</b> Land has not been identified in the floodway overlay (FO).
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	<b>Clause 44.04-7</b> Land Subject to Inundation (LSIO). <b>NA.</b> Land has not been identified in the Inundation overlay (LSIO).
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	<b>Clause 44.05-6</b> Special Building Overlay (SBO). <b>NA.</b> Land has not been identified in the special building overlay (SBO).
		INSERT RELEVANT AUTHORITY AS PER SCHEDULE TO CLAUSE	<b>Clause 44.07-4</b> State Resource Overlay (SRO). <b>NA.</b> Land has not been identified in the state resource overlay (SRO).
		INSERT THE REFERRAL AUTHORITY RESPONSIBLE FOR ACQUIRING THE LAND	<b>Clause 45.01-3</b> Public Acquisition Overlay (PAO). <b>NA.</b> Land has not been identified in the public acquisition overlay (PAO).
✓	✓	DEECA – PEA	<p><b>Clause 66.04</b> Referral of Permit Applications Under Local Provisions</p> <p><i>Indicate relevant Overlay and Schedule to Overlay (if applicable).</i></p> <p>Clause 3.0 of Schedule 3 to Clause 42.01 (ESO).</p> <p>Referred to ascertain any permit requirements for any use or development which the responsible authority (specified in Clause 66.04) considers may not satisfy the environmental objectives of this schedule.</p> <p>The vegetation proposed to be removed is within Location 2 (as defined in DELWP 2017), with one Large scattered tree (with an extent of 0.0703 hectares) proposed to be removed.</p>
<b>MRSDA S.77TE (1A) – Environment Protection Act 2017</b>			
<b>Tick If Applicable</b> ✓	<b>Tick if Referred under the MRSDA</b> ✓	<b>AGENCY</b>	<b>REFERRAL TRIGGER</b>



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		EPA	<p>Mining work plan or work plan variation on a Mining Licence. Automatic referral agency even in the absence of Development Licence or Operating Licence requirements (VPP 66.02-1).</p> <p><b>Not applicable proposal relates to the extractive industry.</b></p>
OTHER REFERRALS			
Tick if Applicable ✓	Tick if referred for comment ✓	AGENCY	REFERRAL TRIGGER
		<p>INSERT RELEVANT WATER BOARD OR WATER SUPPLY AUTHORITY</p> <p>Non-statutory process ONLY</p>	<p><b>Declared Catchment Management.</b> <b>NA – Statutory process.</b></p>
✓	✓	Melbourne Water	<p><b>Floodplains / Catchment Health / Waterways Protection &amp; Management.</b></p> <p>Referred to ascertain any permit requirements as the proposed work is within 100m of a waterway.</p> <p>The area of the proposed extension contains a waterway. Extraction proposed north of the waterway, reinstatement of this area and relocation of the current waterway.</p> <p>Drainage from the undeveloped areas to the north and east of the site flow into a current waterway which enters the site from the south-east and leaves via a culvert under Milners Road to the west and ultimately discharges to the Lang Lang River.</p>
✓	✓	Southern Rural Water	<p><b>Groundwater / Water Use Management.</b></p> <p>Referral to determine 'take and use' permit requirements (if applicable) as dredging forms part of the work plan variation.</p> <p>Hanson has a licence for groundwater extraction from Southern Rural Water (SRW) for 19.5 ML/a which is via transfer annually. This covers groundwater contained in the product which is sold.</p>
		<p>INSERT RELEVANT ELECTRICITY TRANSMISSION AUTHORITY</p>	<p><b>Transmission Network Infrastructure Protection and Management.</b></p> <ul style="list-style-type: none"> <li>Works within 60 metres of a major electricity transmission line (220 Kilovolts or more), or transmission easement.</li> </ul> <p><b>NA – Statutory process.</b></p>



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		Non-statutory process ONLY	
		INSERT RELEVANT AUTHORITY	<p><b>Distribution Network (Power / Gas / Water / Communications) - Infrastructure Protection &amp; Management.</b></p> <p><b>NA.</b> No infrastructure, lines / poles / pits / pipelines above ground or underground are located onsite or within 20m of the final limits of extraction.</p>
		<p>HV</p> <p>Non-statutory process ONLY</p>	<p><b>Archeological Site/s &amp; Object/s Protection &amp; Management.</b></p> <p><b>NA – Statutory process.</b></p>
		INSERT RELEVANT FP- SR REGION	<p><b>Cultural Heritage Protection and Management.</b></p> <p><b>NA - CHMP</b> undertaken in 2012. Six sites recorded with artefacts relocated in protected area.</p> <p>There are areas of Cultural Heritage Sensitivity within the approved work authority and proposed disturbance area.</p> <p>A new Cultural Heritage Management Plan has been approved by the Bunurong Land Council Aboriginal Corporation.</p> <p>The site currently has an area which contains artefacts of cultural heritage significance stored from a previous Cultural Heritage Management Plan. It is proposed to relocate this to the north-western corner of the site and has been discussed with BLCAC however they do not wish to commit to a future location at this time.</p>
		INSERT RAP	<p><b>Cultural Heritage Protection and Management.</b></p> <p><b>NA - CHMP</b> undertaken in 2012. Six sites recorded with artefacts relocated in protected area.</p> <p>There are areas of Cultural Heritage Sensitivity within the approved work authority and proposed disturbance area.</p> <p>A new Cultural Heritage Management Plan has been approved by the Bunurong Land Council Aboriginal Corporation.</p> <p>The site currently has an area which contains artefacts of cultural heritage significance stored from a previous Cultural Heritage Management Plan. It is proposed to relocate this to the north-western corner of the site and has been discussed with BLCAC</p>





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			however they do not wish to commit to a future location at this time.
		Department of Transport	<p><b>Declared Road / Site Access Design.</b></p> <p>Access to the Western Port Road - Although referral to VicRoads is undertaken at the planning permit application stage it is advisable to engage with VicRoads to determine any intersection requirements as this may affect the location of the quarry access point and construction detail.</p> <p>Current operations include the transport of approximately 400,000 tonnes per annum of quarry product. By Section 173 agreement with Council, loaded trucks exit the site via Westernport Road to the South Gippsland Highway. There will be no traffic movement changes with this variation.</p>
✓	NA	Council OR DEECA - PEA	<p><b>Government Road (made/unmade) - Site Design / Road Use.</b></p> <p>Government Roads located on the western and southern boundaries.</p>
✓	✓	DEECA ERR/PEA MoU	<p><b>Environment / Biodiversity Protection and Management.</b></p> <p>Agency referral to confirm the presence of native vegetation and protection of vegetation requirements.</p> <p>Interception of groundwater is proposed and the area of the proposed extension contains a waterway. Extraction proposed north of the waterway, reinstatement of this area and relocation of the current waterway.</p> <p>The vegetation proposed to be removed is within Location 2 (as defined in DELWP 2017), with one Large scattered tree (with an extent of 0.0703 hectares) proposed to be removed.</p> <p>As such, the permit application falls under the Intermediate Assessment pathway. The offset requirement for native vegetation removal is 0.015 General Habitat Units (HUs) and one Large Tree.</p>
✓	✓	DEECA ERR/EPA MoU & Other	<p><b>Discharge / Noise / Environmental Impacts.</b></p> <p>Seeking EPA's consideration and comment if required on the appropriateness of the assessment and management of the risks associated with hazards noise, dust and waste to aquifer in minimising harm as far as reasonably practicable.</p> <p>Agency referral for comment on quarry (respirable crystalline</p>



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			<p>silica) - sensitive receptors within 500m from the buffer and/or limit of extraction.</p> <p>Comment required regarding noise sources and the technical reports that have been provided and licencing requirements for using slimes and filter cake at the site as part of backfilling i.e., EPA licence requirements for depositing a waste product at the site as it relates to groundwater.</p>
		WorkSafe MoU	<p><b>Workers Safety.</b>  <b>NA.</b>          No incidents have occurred onsite or non-compliance with worksafe guidelines.</p>
		INSERT RELEVANT AUTHORITY AS PER SCHEDULE TO cl66.06	<p><b>Notice of Permit Applications Under Local Provisions Clause 66.06 of planning scheme.</b></p> <p><i>Indicate relevant Overlay and Schedule to Overlay (if applicable).</i>  <b>NA.</b></p>
		CFA	<p><b>Fire Protection and Management.</b>          The site includes a BMO or WMO and operations include treatment of waste materials.  <b>NA.</b>          No Bushfire Management Overlay (BMO or WMO).</p>
		Victorian Planning Authority	<p><b>Land Use – UGZ Metro</b>          A Precinct Structure Plan (PSP) is in place or in development, <b>WITHIN</b> Melbourne's urban growth boundary.  <b>NA.</b>          No Precinct Structure Plan.</p>
		DEECA – PEA	<p>Land Use – UGZ Outside Metro          A Precinct Structure Plan (PSP) is in place or in development, <b>OUTSIDE</b> Melbourne's urban growth boundary.  <b>NA.</b>          No Precinct Structure Plan.</p>
		INSERT ANY OTHER RELEVANT AUTHORITY	<p><b>Public Infrastructure Protection and Management.</b></p> <ul style="list-style-type: none"> <li>– Railways / Wind Turbines / Bridges / Reservoir Dam Walls etc.</li> </ul> <p><b>NA.</b>          No related infrastructure is onsite or adjacent. Blasting is not part of work plan variation proposal.</p>
✓	NA	DEECA – ERR Assessments	<b>Earth resources development approval and regulatory matters.</b>
✓	NA	DEECA – ERR Technical Services	<b>Earth resources development approval and regulatory matters.</b>



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	NA	DEECA – ERR Compliance	NA.
	NA	DEECA – ERR Stakeholder Engagement	NA.
✓	NA	Cardinia Shire Council	<b>Planning Permissions / Site Access / Traffic Management.</b>
✓	NA	Land Owner &/OR Representative	<b>Site Access / Rehabilitation.</b>
	NA	Crown Land Manager	<b>Any work proposed under a licence on restricted Crown land.</b> Licensee to be made aware and provide advice regarding the consent requirement. s.44 Particular consent etc. required. NA.
	NA	INSERT MELBOURNE WATER CORPORATION OR AUTHORITY	<b>Any work proposed under a licence on land that is owned, vested, managed or controlled by Melbourne Water Corporation or an authority under the Water Act 1989.</b> Licensee to be made aware and provide advice regarding the consent requirement. s.44 Particular consent etc. required. NA.
	NA	Mineral Tenement Holder	<b>A current minerals licence* covers part or all of the site</b> Licensee to be made aware and provide advice regarding the consent requirement. s.77S MRSDA - Land Subject to a licence under Part 2 An applicant must seek consent from a minerals licence holder (EL, RL, MIN). NA.
<b>EES REFERRAL</b>			
<b>Tick If Applicable</b> ✓	<b>Tick if EES is not required</b> ✓	<b>AGENCY</b>	<b>REFERRAL CRITERIA</b>
		DTP - IAU	<b>Criteria Type – Individual.</b> NA.



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		DTP - IAU	Criteria Type – Combination (2 or more). NA.
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<b>ACRONYM</b>	<b>Description</b>
DEECA PEA	Department of Energy, Environment and Climate Action – Planning and Environment Assessment
DEECA ERR	Department of Energy, Environment and Climate Action – Earth Resources Regulator
DTP IAU	Department of Transport and Planning – Impacts Assessment Unit
EES	Environmental Effects Statement
EPA	Environment Protection Authority
FP-SR	First People – State Relations
HV	Heritage Victoria
RAP	Registered Aboriginal Party
VPP	Victorian Planning Provisions



# Department of Energy, Environment and Climate Action

Arthur Rylah Institute  
123 Brown Street,  
Heidelberg 3084  
[deeca.vic.gov.au](http://deeca.vic.gov.au)

Ref: 00003943

Ben Seamons

Senior Assessment Officer  
Earth Resources Regulator, Resources Victoria  
Department of Energy, Environment and Climate Action

E: [ben.seamons@deeca.vic.gov.au](mailto:ben.seamons@deeca.vic.gov.au)

Dear Ben

## **Work Authority (WA127) Work Plan variation (PLN-1686)**

Thank you for your referral dated 4 March 2024 related to the application for a Sand Quarry Expansion at 870 and 910 Westernport Rd, Yannathan. The application proposes to extend the area of extraction by 22.2Ha in the northern portion of the site and to increase the depth of extraction from 9mAHD to -9mAHD over the entire approved extraction area.

It is noted that the referral, under the June 2022 Memorandum of Understanding (MOU) is in accordance with Clause 77TE of the Mineral Resources (Sustainable Development) Act 1990. Whilst the department does not object to the proposal in accordance with the above legislative requirements, we have identified a substantial number of matters of concern that will need to be addressed by the proponent (Hanson) in order to provide for an appropriate and considered proposal.

In response to your suggestions in email dated 26th April 2024, please find the amended recommendations below:

### **RECOMMENDATIONS**

The Department of Energy, Environment and Climate Action (DEECA) does not object to the granting of a Works Authority variation for the above application on biodiversity grounds, and recommends the following conditions be included on any variation granted:

#### **Conditions**

1. Before works start, the WA holder must advise all persons undertaking the vegetation removal or works on site of all relevant WA conditions, planning permit conditions and associated statutory requirements or approvals.
2. The total area of native vegetation approved to be removed as part of this variation is 0.070 hectares, comprised of:
  - a. 1 large scattered tree.

Any personal information about you or a third party in your correspondence will be protected under the provisions of the *Privacy and Data Protection Act 2014*. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorized by law. Enquiries about access to information about you held by the Department should be directed to [foi.unit@delwp.vic.gov.au](mailto:foi.unit@delwp.vic.gov.au) or FOI Unit, Department of Energy, Environment and Climate Action, PO Box 500, East Melbourne, Victoria 8002.



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3. To offset the proposed clearing under this WA in accordance with the [Guidelines for the removal, destruction or lopping of native vegetation \(DELWP 2017\)](#), the holder must secure general offset of 0.015 general habitat units:
  - a. located within the Port Phillip and Westernport Catchment Management boundary or Cardinia Shire Council municipal area
  - b. with a minimum strategic biodiversity score of at least 0.352

The offset(s) secured must also protect 1 large tree.

4. Before any native vegetation is removed evidence that the required offset has been secured must be provided to the satisfaction of the responsible authority. This evidence must be one or both of the following:
  - a. an established first party offset site including a security agreement signed by both parties, and a management plan detailing the 10-year management actions and ongoing management of the site, and/or
  - b. credit extract(s) allocated to the permit from the Native Vegetation Credit Register.
5. A copy of the offset evidence must be endorsed by the responsible authority for the planning permit and will form part of that permit. Within 30 days of endorsement of the offset evidence, a copy of the endorsed offset evidence must be provided to Planning and Environment Assessment at DEECA.
6. Where the offset includes a first party offset(s), the permit holder must provide an annual offset site report to the responsible authority by the anniversary date of the execution of the offset security agreement, for a period of 10 consecutive years. After the tenth year, the landowner must provide a report at the reasonable request of a statutory authority.
7. Within 6 months of the conclusion of the permitted clearing of native vegetation the offset requirements can be reconciled with the written agreement of the responsible authority and DEECA.
8. A suitably qualified wildlife handler or zoologist is to be present when felling trees/removing native vegetation (including planted and regrowth vegetation and when removing constructed dams/wetlands) to ensure affected wildlife is not harmed. If displaced wildlife that cannot be relocated on site to an appropriate location away from the construction footprint, or injured wildlife is captured, please contact DEECA on 136 186 for further advice.
9. Within the area of native vegetation to be retained and any tree protection zone associated with the permitted use and/or development, the following is prohibited:
  - a. Any vehicle or pedestrian access, trenching or soil excavation, and
  - b. Storage or dumping of any soils, materials, equipment, vehicles, machinery, or waste products, and
  - c. Entry or exit pits for underground services, and
  - d. Any other actions or activities that may result in adverse impacts to retained native vegetation.
10. Prior to work commencing the work authority holder must develop a **Vegetation Management Plan** which includes a risk management plan with measures to ensure:
  - a. Compliance with Conditions 1, 8 and 9.

- b. Management controls for potential risk events generated by quarrying activities that may impact on flora and fauna on and offsite.
  - c. Appropriate monitoring of the effectiveness of management controls in mitigating impacts to sensitive biodiversity receptors on and offsite.
  - d. Appropriate adaptive management measures are applied based on the outcomes of monitoring.
  - e. Maps showing the WA boundary, extraction zones, works exclusion buffer zones, the location of 'No Go' zones and tree protection zones.
11. Prior to work commencing the work authority holder must develop a **Waterway Realignment and Landscape Plan** (or equivalent) that includes measures to ensure:
- a. Management controls for potential risk events generated by quarrying activities that may impact on flora and fauna on and offsite.

If you would like further information on specific biodiversity matters, please do not hesitate to contact the Natural Environment Programs branch by email at [ppr.majorprojects@delwp.vic.gov.au](mailto:ppr.majorprojects@delwp.vic.gov.au)

I can also be contacted on [pe.assessment@delwp.vic.gov.au](mailto:pe.assessment@delwp.vic.gov.au) regarding any other matters.

Yours Sincerely,



**Marc Boxer**  
**Team Leader | Major Projects | Planning and Environment Approvals**  
**Port Phillip Region | Department of Energy, Environment and Climate Action**

*Revision #1 dated 29 April 2024*



Rohan Bett  
Earth Resources Regulation  
GPO Box 500  
Melbourne, Victoria 3001  
Via email: [Workplan.Approvals@deeca.vic.gov.au](mailto:Workplan.Approvals@deeca.vic.gov.au)

23 April 2024

EPA ref: REQ004480

Dear Rohan,

**RE: WORK AUTHORITY WA127 – WORK PLAN VARIATION – AGENCY COMMENT REFERRAL**

Thank you for your correspondence in relation to Work Authority WA127, referred to EPA on 8 March 2024. The Work Plan Variation (WPV) relates to an extension to operations at Hanson Construction Materials Pty Ltd in Westernport Road, Yannathan. The WPV proposes to; extend the area of extraction by 22.2Ha in the northern portion of the site; increase the depth of extraction from 9 mAHD to -9 mAHD over the entire approved extraction area; increase in hours – 6am to 10pm Monday to Saturday; Increase in extraction from 250,000 to 400,000 tonne per annum.

EPA understand that your request for agency comment is made under the Memorandum of Understanding (MoU) between EPA and ERR, based on the referral triggers outlined therein. In this instance ERR are seeking EPA's comments on the appropriateness of the assessment and management of the risks associated with hazards noise, dust, and waste to aquifer in minimising harm as far as reasonably practicable.

The comments EPA make in this letter are based on the information provided and our understanding of the operation.

EPA reviewed the information supplied as part of the referral including:

- WA127 Yannathan, Part 1 summary report, Increased area and depth application, Client: Hanson Construction Materials, Ricardo ref. 30765, Issue:6, 21/12/2023
- Air Quality Impact Assessment, Air dispersion modelling, Hanson sand quarry, Hanson construction materials, 870-910 Westernport Road, Yannathan, Vic, April 2023, 20220075-R-01 AQ MOD\_v3
- Hanson construction materials, Yannathan Quarry Extension, Surface water management plan, September 2022, V1259 -002-REP-001-6
- Yannathan quarry rehabilitation plan, WA127, Client: Hanson construction materials, Ricardo ref 30765, Issue: V6.0, 16/12/2023
- WA127 Yannathan, Slimes management plan, Client: Hason construction materials, Ricardo ref. 30765, Issue:4, 13/12/2023
- Yannathan hydrogeological assessment, WA127, Client: Hanson construction materials, Ricardo ref. 30765, Issue:5, 11/12/2023

[epa.vic.gov.au](http://epa.vic.gov.au)

Environment Protection Authority Victoria  
GPO Box 4395, Melbourne VIC 3001  
1300 372 842





EPA Provides the following response:

### Environment Protection Act 2017

The Environment Protection Act 2017 (EP Act 2017) has been in force since 1 July 2021. Subordinate legislation supporting the EP Act 2017 includes the Environment Protection Regulations 2021 (regulations), the Environment Reference Standard (ERS) and associated guidelines (all of which are amended or replaced from time to time). A key feature of the EP Act 2017 is the general environmental duty (GED), which requires a person engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste to minimise those risks, so far as reasonably practicable. The GED is relevant to all activities undertaken as part of the proposal. EPA notes that additional mitigation measures may be required to minimise the risk of harm to human health or the environment so far as reasonably practicable under the GED. These additional measures may evolve overtime as the 'state of knowledge' evolves.

### Groundwater

EPA has a role in the protection and improvement of groundwater quality, in line with the ERS (Part 5 – Water). Risks to groundwater may be considered as minimised when the applicable environmental values are maintained or achieved.

After reviewing multiple documents EPA have found a number of gaps in information provided. These are listed below in relation to groundwater.

#	EPA Science Recommendation	EPA Science Justification
1	It is recommended that the proponent is asked to undertake a risk assessment for the use and disposal of the coagulant / flocculant chemicals, considering any degradation products (little characterisation of the poly DADMAC degradation products is currently provided) or potential impurities in the products used. This should assess the mass of the chemicals proposed to be used and the fate of the chemicals.	The quantities of coagulants / flocculants used in the process appear to be relatively large and it is unclear what the fate of these chemicals are. The chemicals are used to generate the slimes and filter cake which is then disposed of in the quarry void. Given these voids appear to be below the long-term groundwater level there is a potential pathway through groundwater. The chemicals stated to be used as coagulants / flocculants are unlikely to be mobile in the environment, but it is unclear whether remnant precursors or degradation products are.
2	It is recommended that the primary chemical and degradation products in the coagulant and flocculant products are monitored for in the process water, surface water and groundwater to inform their fate in the environment.	
3	It is recommended that the proponent investigates the potential for acid generation of the material being disturbed beyond the surficial soils. This may require	It is noted that the CSIRO Atlas of Australian Acid Sulfate soils addresses the upper profile of soil and may not reflect the acid generating potential of material at depth. The WPV rehabilitation chapter indicates that a layer of black sands separates

<p>the development of an acid soil management plan.</p>	<p>upper and lower clean sands. Elsewhere in Victoria (e.g. Brighton group), organic black sands are pyritic and have acid generating potential.</p> <p>The low pH values in the Southwest may be an indicator that oxidation is occurring due to higher oxygen in the surface water body being supplied to the aquifer.</p>
<p><b>4</b> The proponent should be asked to provide information on the chemical characterisation of the materials and groundwater being extracted.</p>	<p>Little characterisation is provided on the materials to be extracted and groundwater quality of the two aquifers. This makes an assessment of the possible impact of disturbing the material, changing groundwater conditions, management of extracted groundwater and the disposal or the slimes/filter cake difficult.</p>
<p><b>5</b> The proponent should be asked to clarify the screened interval for bores in mAHD and the units for the black sands in Table 3-1.</p>	<p>It is unclear which aquifers the bores are monitoring, and whether any monitor the lower sand aquifer (below the black sand layer).</p>
<p><b>6</b> The proponent should be asked to assess the potential impacts of removing the confining black sand layer. In addition, groundwater from the lower sand aquifer will be entrained with the dredged material, but the fate and potential impact of this is unclear.</p>	<p>The proposal will remove the confining layer between the two systems and may impact the water quality of either aquifer. The disposal of groundwater from the lower aquifer to surface water storages has the potential to increase the salinity of the upper aquifer.</p>
<p><b>7</b> It is recommended that further monitoring bores be placed in the Southwest section of the site, where acidic pH is reported. This should follow publication EPA Pub 668 and EPA Pub 2033. Given the proximity of the off-site bore in this area, monitoring of that location is also recommended, if possible.</p>	<p>From the monitoring data provided in Table 3-3 and Section 3.2.3, it appears that the western area of the site appears to have lower pH than other areas of the site. This appears to coincide with higher dissolved oxygen and ORP, potentially indicating oxidation occurring. The current bore coverage is insufficient to adequately determine the flow in that area of the site.</p>
<p><b>8</b> It is recommended that on-going monitoring of the groundwater should be undertaken, and the new bores commissioned and monitored prior to extension of the quarry. A groundwater quality monitoring plan should be developed, with clear target analytes and frequency of sampling. In addition, a groundwater Trigger Action Response Plan (TARP) should be developed for groundwater quality.</p>	<p>The on-going groundwater monitoring plan is unclear and little information is provided on the target analytes or the frequency of monitoring. No groundwater Trigger Action Response Plan (TARP) is provided, and it is unclear what actions will take place if chemical indicators indicate a change in groundwater quality.</p>

<p><b>9</b> In relation to the water balance, it is recommended that the Duty Holder provide more information on the following:</p> <ul style="list-style-type: none"> <li>• A greater explanation of the fate of the water removed during extraction (dry extraction and dredging). This should include the moisture content on removal, any removal of water (and its fate) and the volume of water lost with the product and disposed of in the slimes/filter cake. What impact this removal of water in the dredged material will have on the groundwater levels should also be provided in addition to the potential impact this may have on groundwater in the upper aquifer.</li> <li>• Clarify what the assumption of 50% of water in the end product being groundwater is based on.</li> </ul> <p>The rainfall and evaporation for wet years should be contextualised by comparison to actual climate statistics for the site.</p>	<p>The volume and fate of the water removed during extraction (dry extraction and dredging) is unclear. It is unclear if the water balance includes the volume of material removed in the slimes/filtercake, which are reported to be a higher moisture content. This may transfer groundwater from the lower aquifer as part of the dredged material into the upper aquifer via the slimes/filter cake disposal route.</p> <p>The derivation of the wet years rainfall and evaporation data used in the water balance is unclear. Specifically, it is unclear how this compares to actual climate records for the site.</p>
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**Air**

EPA has a key role in protecting Victoria’s air quality. The Guideline for assessing and minimising air pollution in Victoria (EPA publication 1961) provides a framework for assessing risks to human health and the environment from air emissions and the management and monitoring required to maintain effective risk controls (refer to section 8 of the guideline). The framework described within this guideline can be used to inform the air quality management and monitoring practices for the construction and operational phases of the quarry.

EPA’s Civil construction, building and demolition guide (EPA publication 1834) provides construction related guidance to eliminate or reduce the risk of harm to human health and the environment through good environmental practice.

Air pollution through the generation of dust is a potential impact from earthworks during construction, operation, rehabilitation, and closure. Airborne dust consists of particles suspended in air, whilst deposited dust is that which has settled from air onto surfaces and structures. All dust has the potential to impact health and wellbeing, local amenity, visibility, and ecosystems.

While the modelling undertaken appears generally acceptable, it should be noted that in 2022 EPA recommended that background monitoring be conducted as the best way to understand the impacts of the WPV. This monitoring has not been undertaken and data from elsewhere has been used instead. Given the quarry is already operation at the site, background monitoring is preferred to understand the background conditions and impacts of expansion.

In reviewing the modelling conducted EPA have the following comments:

- While background data for PM10 and PM2.5 have been used, N2 and CO2 have not. Although these are not likely to be material to the assessment they would usually be used in the background for modelling.
- No data looks to have been collected on Respirable Crystalline Silica (RCS). It would be good to include information on this in the assessment. Hanson may have data collected from their Lysterfield quarry extension that might be useful here.

While there are a few gaps in the assessment EPA believes they are not detrimental to our response. We have not seen the Site Environment Management Plan that is referred to. ERR could focus on ensuring that this document is sound and implemented as the means of control of impacts on this site.

### **Surface Water**

EPA has a key role in the protection and improvement of Victorias surface water quality in line with the ERS 2021 (Part 5 – Water). Duty Holders are required to determine the surface water environmental values referring to the ERS. Identification of controls, management, monitoring and verification of the controls and contingency measures should be undertaken. This will assist in adequately assessing and addressing risks to human health and environment of surface water from pollution or waste and to eliminate or minimise risk of harm as far as reasonably practicable.

EPA have identified the following gaps in the rehabilitation plan:

- Section 2.3.2 – The environmental values of surface water, as outlined in the ERS should be mentioned in this section.
- 6.4.4.6, Table 6-28 - Traditional Owner Cultural Values - The Traditional Owners may be consulted on this Environmental Value in order to determine the values for the site post-rehabilitation.
- Section 5.8.2.2 - What is the expected water quality of the pit lake? And how will the environmental values identified for the pit lake be affected?
- Table 6-1 - What is the risk to the stability and water quality of the pit lakes in the event of a 1 in 100-year flood or large storm event?
- Table 6-9 - The tables in Section 6.4 outline the risks and controls, it is unclear whether these are identified risks post closure or during operation. It would be beneficial to have this clarified. For example, it's not clear why the proponent identifies that chemical spills are a risk when no chemicals will be stored on site post-closure. Another example is that the sediment ponds will be discharging to water after sediment has fallen out of suspension. It is not clear if there plans to have specific sediment ponds on site or just the pit lake.
- Table 6-9, Control ID C14 – The information is a little unclear, what type of water is expected to be discharged and why? Under what scenarios? Explaining this information fully will give ERR the change to properly assess the WPV.

Neither the Surface water management plan or the rehabilitation plan mention the surface water monitoring that is either currently undertaken or is likely to be undertaken with the relocation of the waterway and in the rehabilitation plan. Based on this gap, investigating the questions below may help to determine future off-site risk of this WPV:

- Is there or will there be surface water monitoring (the rehabilitation plan mentions some in section 5.8.2.2)? If so, what is the frequency of this monitoring?
- What are the analytes being monitored and for what reason?

- Is it likely to that polluted water will travel off site and affect downstream users or habitats? If it is not likely, why not?

### Permissions

ERR should confirm whether the slimes / filter cake will be disposed of below the long-term groundwater level. If so, this may require an A18 permit, as waste material is being deposited to the aquifer. It should also be confirmed whether, as part of the dredging, other waste is placed in the aquifer. Standing water levels in groundwater bores from across the site are reported to be within 19 mAHD to 25 mAHD. The recovered water level is reported to be approximately 24 mAHD. The provided cross sections indicate that the future and existing filter cake cells may intersect groundwater.

To further understand the permission requirements under the EP Act 2017, the proponent should seek advice from EPA's permissioning unit through submitting a permissions pathway form, available at: <https://www.epa.vic.gov.au/for-business/permissions/check-if-you-need-a-permission>.

### Noise

EPA have been unable to undertake a technical review of the Noise Emissions Assessment within the timeframe requested by ERR for response. Given this, the comments EPA offer in relation to noise are general in nature to support ERR in undertaking their assessment.

Noise, including vibration, must be managed for construction, operation, rehabilitation, and closure activities in accordance with the GED. This involves applying controls and measures to eliminate the risk of harm to human health and the environment, and wherever elimination is not reasonably practicable, the risk is to be minimised so far as reasonably practicable. Concurrently, noise must not be emitted, from a place or premises that is not a residential premises, if it is 'unreasonable noise' (section 166 of the EP Act 2017).

### Greenhouse gas emissions

In September 2022, EPA published publication 2048 – Guideline for minimising greenhouse gas emissions. To better understand the potential impacts on climate change from the proposal and obligations set under the GED, the Duty Holder would need to undertake further work.

If you would like any further information, please contact Nicole Porter at [nicole.porter@epa.vic.gov.au](mailto:nicole.porter@epa.vic.gov.au) or 03 9194 5594.

Yours sincerely,



**Jo Coupar**  
Team Leader, Development and Earth Resources Advisory  
Development Advisory Unit  
EPA Victoria

Ref: PLN-001686

Rohan Bett  
Assistant Director, Assessments  
Earth Resources Regulation  
Department of Jobs, Precincts and Regions  
GPO Box 2392

MELBOURNE VIC 3001  
By email: [workplan.approvals@evodev.vic.gov.au](mailto:workplan.approvals@evodev.vic.gov.au)

Dear Rohan

**STATUTORY ENDORSEMENT REFERRAL OF WA127**

Thank you for referring this work plan to Heritage Victoria.

Our records indicate that there are no places currently included in the Victorian Heritage Register (VHR) or Heritage Inventory (HI) within the subject area.

Heritage Victoria does not object to statutory endorsement of the variation to the approved work plan.

Please note the HI is not a comprehensive list of all historical archaeological sites in the state. The absence of sites in the HI is not necessarily reflective of the distribution of archaeological sites on the ground, and the *Heritage Act 2017* provides blanket protection for all historical archaeological sites in Victoria. If archaeological deposits are identified at any stage during works, this office must be notified immediately. Please be aware that consent from this office is required for any works that will impact on any historical archaeological sites.

Should you have any queries, please contact Nicole Smith or Redd Peters at Heritage Victoria on 03 7022 6390 or email [heritage.victoria@delwp.vic.gov.au](mailto:heritage.victoria@delwp.vic.gov.au).

Yours sincerely



**Steven Avery**  
Executive Director  
Heritage Victoria

20/ 03/ 2024

03 April 2024

Ben Seamons  
DELWP Department of Environment, Land, Water & Planning  
GPO Box 500  
Melbourne VIC 3001

Dear Ben,

**Proposal:** Work Authority WA127 Referral - Work Plan Variation  
**Site location:** 870 and 910 Westernport Road, Yannathan, VIC 3981

**Melbourne Water reference:** MWA-1322011  
**Other/Your reference:** WA127  
**Date referred:** 04/03/2024

Thank you for your referral of the Work Authority WA127 - Work Plan Variation for the subject property.

Melbourne Water has reviewed the submitted information and provides the following conditions for inclusion on the permit:

1. Prior to commencement of works, a Drainage and Stormwater Management Strategy must be submitted to Melbourne Water for approval, which calculates the catchment area, drainage outfall locations, new drainage works, existing drainage infrastructure and details of flow levels and flood levels for the 100-year ARI storm event. The subdivision will need to cater for flooding and waterway enhancement works and the drainage strategy will need to highlight how it is intended to deal with the existing waterway, flood levels and flow that run through the property.
2. Prior to commencement of works the Owner shall enter into and comply with an agreement with Melbourne Water Corporation for the acceptance of surface and storm water from the subject land directly or indirectly into Melbourne Water's drainage systems and waterways, the provision of drainage works and other matters in accordance with the statutory powers of Melbourne Water Corporation.
3. Prior to the commencement of works a separate application to Melbourne Water must be made and approved of any new or modified storm water connection to Melbourne Water's drains or watercourses. Prior to accepting an application, evidence must be provided demonstrating that Council considers that it is not feasible to connect to the local drainage system.

### **Additional comments - Review of Surface Water Management Plan (SWMP)**

Melbourne Water has been involved in the process of reviewing the currently submitted SWMP (September 2022) provided by Engeny under application reference MWA-1188291. There are several outstanding key issues with the current submission which are yet to be addressed prior to approval from Melbourne Water,



outlined as follows:

### Hydraulic assessment

- Page 27 of the report mentions that the HECRAS modelling demonstrates minimal changes in levels from a conveyance point of view due to the proposed works. However, crucial details are missing. The report does not specify the extent of the flood level increase, nor does it clarify whether the flood level increase occurs within or beyond the property boundary.
- In our previous correspondence, it was stated that the remodelling must not result in an increase in velocity within the realigned reach. However, the report indicates velocity increases of approximately 1m/s at certain cross sections of the realigned channel. Such a significant change in velocity is unacceptable. We request a thorough justification for this observed increase.
- The report lacks clarity on the location of the proposed flood storage changes. Given the noted increase in velocity at specific cross sections of the realigned channel, it is imperative to have a comprehensive understanding of the proposed flood storage arrangements within the scope of the project.

### Waterway health and environmental assessment

1. The Stormwater Management Strategy shows the design of the realigned channel as having a much enlarged channel size than the Section A which is upstream. Review of the concept design for Section B generates the following comments:

- The waterway form of Section B is not consistent with Section A even though on p28 of the Strategy it is stated that "The proposal is to build a similar style of constructed waterway to what now exists in Reach A. On this basis it would be expected that the waterway diversion would improve the overall condition of reaches B and C of the waterway once the diversion construction is completed." From a geomorphic & waterway health perspective this would be a preferred scenario. Utilising a meandering low flow channel within a wider floodplain corridor in a similar proposal to Reach A and designing this to mimic the Swampy riparian woodland small, low gradient waterways of the local area would be a geomorphically more appropriate waterway in the landscape context and would transition into upstream & downstream reaches.

2. Melbourne Water has concerns regarding construction of a waterway within backfill conditions, and our preference would be that the proposed waterway alignment corridor remain under natural conditions – ie not be excavated for improved stability & long term viability.

3. Melbourne Water requires that works be conducted during low flow conditions, i.e. in summer and that the realigned waterway be constructed and stabilised prior to carrying any flow. This will help to minimise transportation of sediment downstream.

4. Provision of adequate maintenance access to waterway

5. A landscape concept plan is to be included with the realignment design showing revegetation of the waterway & corridor to mimic Swampy Riparian woodland EVC

and consideration of the movement of water through the site & waterway corridor.

6. Provision of a waterway corridor similar in width or greater to Reach A which can supply the floodplain function & transfer flows above the low flow capacity of the channel.

7. Provide further information of the consideration of the realigned waterway design in the context of long term rehabilitation of the site.

8. Provide Fencing to exclude livestock from waterway & corridor – Note: this was also a condition of realignment of Reach A but photos suggest livestock have had access to waterway which will have impacted vegetation establishment success & potentially waterway stability.

The above requirements have been included in a letter to the applicant (Engeny) of 27 July 2022, which are to be addressed in any amended submission as part of the SWMP and/or work authority work plan for further review by Melbourne Water.

### **Advice**

The above waterway health requirements and hydraulic components (including flood modelling) will need to be addressed and resolved prior to/or under the works offer process.

In order to proceed with formal approval for the proposed waterway re-alignment, please apply for a works offer application via the following link:  
<https://apply.melbournewater.com.au/develop/online.html?ApplicationType=OOCW>  
All waterway crossings should be constructed according to Melbourne Water Guidelines and submitted to Melbourne Water for approval. Please see following link for further advice: <https://www.melbournewater.com.au/planning-and-building/apply-tobuildordevelop/construct-bridge-crossing-or-culvert>

The Melbourne Water conditions 36 to 50 in the planning permit no. T140140 - 1 are still applicable.

For general development enquiries contact our Customer Service Centre on 131722.

Regards,

A handwritten signature in black ink, appearing to read "Segujja".

Segujja Kakembo  
Statutory Referral Permit Services

26 April 2024

**Rohan Bett**

Delegate of the Department Head  
Assistant Director, Rehabilitation Liability Assessment and Bonds  
Earth Resources Regulator  
Sent by email to [Workplan.Approvals@deeca.vic.gov.au](mailto:Workplan.Approvals@deeca.vic.gov.au)

Dear Rohan

**Hanson Yannathan Quarry (Lang Lang) – SRW feedback in relation to proposed quarry expansion (Work Plan Variation WA127)**

Thank you for the opportunity to comment on the proposed quarry expansion at Yannathan Quarry (Lang Lang).

Our feedback is as follows:

- Based on the information provided the existing 19ML groundwater licence held by Hanson for the site is likely to be sufficient during the operation of the expanded quarry. However we note that the post closure evaporation losses from the ponds (which will essentially be windows into shallow aquifer) are calculated by Hanson to be up to 42 ML/a. This figure could be higher with increased climate change, where evaporation is expected to increase and rainfall to decrease. SRWs review of Hansons calculations suggests there is some uncertainty over this volume, and that there is the potential for higher levels of post-closure net groundwater evaporative losses from the ponds, which could be as high as 90ML/a. Given that this is a capped groundwater Water Supply Protection Area, the potential future groundwater losses of up to 90ML/a are a concern, and may in future require a larger groundwater licence to cover the losses. SRW would like to see more data collected and reported annually from the quarry to inform the estimation of future evaporation from the site. It is proposed that this is reviewed in future and considered as part of the implementation of the Quarry Rehabilitation Plan.
- SRW believe that there is still significant uncertainty around the origin of the low pH groundwater at and around the site, and whether this is naturally occurring or whether the quarry has contributed to the low pH. The future risks to the local groundwater resources and the local groundwater dependant values associated with this low pH groundwater are also unclear. SRW suggests that further investigations are undertaken by Hanson, and that if necessary a post-closure groundwater quality risk and management plan be developed.

- A suitable water quality monitoring plan, with triggers and actions should be developed to ensure no unacceptable offsite impacts. Groundwater quality data should be collated annually and reports made available to the relevant authorities
- SRW recommend that the groundwater monitoring network is expanded to ensure that the upper shallow aquifer and the lower shallow aquifer are both monitored around the perimeter of the proposed quarry property. This is particularly important given the number of stock and domestic and licensed bores in the vicinity. Groundwater level data should be collated annually and reports made available to the relevant authorities.

Regards

Yours sincerely,

*Matthew Hudson*

Principal Hydrogeologist

Email [Matthewh@srw.com.au](mailto:Matthewh@srw.com.au)